

About... Legionellosis

What is legionellosis?

Legionellosis is an infection caused by *Legionella pneumophila* bacteria. The disease has two forms:

- Legionnaires' disease – a severe respiratory infection (pneumonia) that can be fatal. Legionnaires' disease most often occurs in middle-aged and older persons who smoke tobacco-containing products or who have weakened immune systems.
- Pontiac fever – a mild respiratory infection that is not fatal. Pontiac fever is much less severe than Legionnaires' disease and can occur in persons of any age, including those with healthy immune systems.

What are the symptoms of legionellosis?

The early symptoms of Legionnaires' disease include:

- fever
- chills
- lack of energy
- cough
- muscle aches
- headache
- loss of appetite
- sometimes diarrhea

Pneumonia develops after onset of these symptoms. Symptoms of Legionnaires' disease usually appear from 2-10 days following exposure.

Symptoms of Pontiac fever are the same as the early symptoms of Legionnaires' disease; however, Pontiac fever does not progress to pneumonia. Symptoms of Pontiac fever usually appear from 24-48 hours following exposure.

How can you get legionellosis?

Legionnaires' disease is transmitted by breathing in water droplets contaminated with *Legionella* bacteria. The source of contamination may come from water contaminated in the patient's home or workplace. Outbreaks have been associated with exposure to contaminated water towers, evaporative condensers, potable water systems, whirlpool spas, water faucets, showers, humidifiers, and respiratory therapy equipment. Outbreaks have occurred in hospitals, cruise ships, hotels, and other large buildings. *Legionella* bacteria have been found worldwide in creeks and ponds and in the soil along their banks.

Legionella bacteria reproduce in high numbers in warm, stagnant water (90°-105°F). When someone inhales water droplets contaminated with *Legionella* bacteria, the bacteria can infect the lungs and cause illness.

How is legionellosis diagnosed?

Laboratory testing is usually needed to confirm a diagnosis of legionellosis. Your health care provider may take a sample of respiratory secretions, lung tissue, urine, or fluid from the lungs to test for *Legionella* bacteria. Because almost all people have been exposed to the bacteria at some time, laboratory results must be examined carefully to identify a recent infection and not a past exposure to the bacteria.

How is legionellosis treated?

Antibiotics are usually required to treat Legionnaires' disease. Sometimes supportive therapy is needed to help people with Legionnaires' disease breathe easier. Pontiac fever generally requires no specific treatment.

How can legionellosis be prevented?

Improved design and maintenance of cooling towers and plumbing systems to limit the growth and spread of *Legionella* bacteria are important. Other preventive measures include:

- Properly maintain whirlpool tubs, hot tubs and spas, humidifiers, and decorative fountains in the home. Clean and run them frequently to prevent growth of *Legionella* bacteria.
- Avoid inhaling water or dunking your head underwater when using hot tubs and spas.
- If the water looks dirty or cloudy, avoid using hot tubs, spas, or whirlpool tubs in public places.

For additional information on legionellosis, please visit the Centers for Disease Control and Prevention (CDC) Web site at:

http://www.cdc.gov/ncidod/dbmd/diseaseinfo/legionellosis_g.htm

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